

Notice of Allowability

Application No.

10/696,928

Applicant(s)

BERKEY ET AL.

Examiner

Art Unit

Ryan Lepisto

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to amendment filed 20 March 2006.2. The allowed claim(s) is/are 2-18.3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).a) All b) Some* c) None of the:1. Certified copies of the priority documents have been received.2. Certified copies of the priority documents have been received in Application No. _____.3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.(a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) hereto or 2) to Paper No./Mail Date _____.(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.**Attachment(s)**

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.

DETAILED ACTION

Allowable Subject Matter

1. **Claims 2-18** are allowed.

The following is an examiner's statement of reasons for allowance:

With regard to claims 2 and 18: These claims are allowable over the prior art of record because the latter, either alone or in combination, does not disclose nor render obvious either an optically active linear single polarization device comprising a linearly birefringent and linearly dichroic optical waveguide for propagating light and having a single polarization wavelength range and a plurality of active dopants disposed in a portion of the linearly birefringent and linearly dichroic optical waveguide for providing operation of the waveguide in an operating wavelength range for overlapping the single polarization wavelength range wherein the waveguide comprising a polarization maintaining (PM) fiber having optical fiber polarization components along a first linear polarization characteristic mode and along a second linear polarization characteristic mode with a sufficient differential polarization dependent loss (PDL) between the first and second modes accumulated over a sufficiently long waveguide length such that the first polarization mode has a first attenuation of at least 3 dB at a first cut-off wavelength and the second polarization has a second attenuator of at least 3 dB at a second cut-off wavelength to provide the single polarization wavelength range having a single polarization center wavelength between the first and second cut-off wavelengths and the first cut-off wavelength is less than the second cut-off wavelength, wherein the single polarization center wavelength is sufficiently close to the center operating

wavelength of the operating wavelength range or a linear single-polarization double-clad fiber laser comprising a pump source, a double-clad linearly birefringent and linearly dichroic fiber having a first end for receiving the pump light, a second end for outputting a laser signal and a single polarization wavelength range, a core having an elliptical shape to provide large modal area having a core index delta to provide a numerical aperture of about 0.06 to 0.08 for supporting close to a single-mode transmission of the laser signal and doped with a plurality of optically excitable dopants having a transition requiring an inversion at a desired signal wavelength, a grating on the fiber for providing feedback over a narrowband wavelength range within the single polarization wavelength range, an inner cladding adjacent to core for receiving pump light, and an outer cladding adjacent to the inner cladding having an index of refraction less than the inner cladding, in combination with the rest of the claimed limitations.

With regard to claims 3-17: These claims are allowable over the prior art of record because they depend from an allowed claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Lepisto whose telephone number is (571) 272-1946. The examiner can normally be reached on M-Th 7:30AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ryan Lepisto

Art Unit 2883

Date: 4/20/06



Frank Font

Supervisory Patent Examiner

Technology Center 2800